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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,541	02/21/2002	Ashutosh Pande	83386.0077	5936

26021 7590 03/04/2003

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EXAMINER

MULL, FRED H

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 03/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/082,541

Applicant(s)

PANDE ET AL.

Examiner

Fred H. Mull

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 3-24-2002, 5-8-2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Information Disclosure Statement*

1. The MPEP states the following with respect to large information disclosure statements:

*Although a concise explanation of the relevance of information is not required for English language information, applicants are encouraged to provide a concise explanation of why the English-language information is being submitted. Concise explanations (especially those that point out the relevant pages and lines) are helpful to the Office, particularly where documents are lengthy and complex and **applicant is aware of a section that is highly relevant to patentability** or where a large number of documents are submitted and **applicant is aware that one or more is highly relevant to patentability**. -- MPEP § 609 (emphasis added).*

“Aids to Compliance With Duty of Disclosure,” item 13:

*It is desirable to avoid the submission of long lists of documents if it can be avoided. Eliminate clearly irrelevant information and marginally pertinent cumulative information. If a long list is submitted, **highlight those documents which have been specifically brought to Applicant's attention and/or are known to be of the most significance**. -- MPEP § 2004 (emphasis added).*

Therefore, it is recommended that if any information that has been cited by Applicant in the Information Disclosure Statement(s) is known to be material to patentability as defined by 37 CFR § 1.56, Applicant should present a concise statement as to the relevance of that/those particular documents.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 3-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Bloebaum.

In regard to claim 1, Bloebaum discloses a call processing section, coupled to the GPS section via an interface (paragraph 7), a first message being passed from the call processing section to the GPS section via the interface, and a second message is passed via the interface from the GPS section to the call processing section in response thereto, wherein the first message is a Quality of Service (QoS) message and the second message is a QoS response message; a location aiding server (18, Fig. 1), and a communication system, coupled to the GPS section and the call processing section, for selectively transmitting first data to the GPS terminal from the location aiding server and receiving data from the GPS terminal to be sent to the location aiding server, based on the first message and the second message (paragraphs 25-34). Specifically, the first message occurs in paragraph 26, lines 1-4, and the second message occurs in paragraph 32, lines 1-4, where in this case the microprocessor 116 determines, and thus the info that is passed from the GPS section to the microprocessor (i.e. the date of the currently stored aiding data) is the second message.

In regard to claim 3, Bloebaum further discloses the GPS section further comprises a processor (104) separate from the call processor (116).

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In regard to claim 4, always passing the date of the currently stored aiding data is a predetermined strategy.

4. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsujimoto '560.

Tsujimoto '560 discloses a call processing section, coupled to the GPS section via an interface, a first message being passed from the call processing section to the GPS section via the interface, and a second message is passed via the interface from the GPS section to the call processing section in response thereto, wherein the first message is a Quality of Service (QoS) message and the second message is a QoS response message; a location aiding server, and a communication system, coupled to the GPS section and the call processing section, for selectively transmitting first data to the GPS terminal from the location aiding server and receiving data from the GPS terminal to be sent to the location aiding server, based on the first message and the second message (Fig. 3; paragraphs 9-10 and 35-60).

5. Claims 1, 3-6, and 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated by IDS Document Watters (US 5,982,324 A).

In regard to claim 1, Watters discloses a call processing section (505, Fig. 5), coupled to the GPS section (555) via an interface (515-520), a first message being passed from the call processing section to the GPS section via the interface, and a second message is passed via the interface from the GPS section to the call processing section in response thereto, wherein the first message is a Quality of Service (QoS) message and the second message is a QoS response message; a location aiding server (410, Fig. 4), and a communication system, coupled to the GPS

section and the call processing section, for selectively transmitting first data to the GPS terminal from the location aiding server and receiving data from the GPS terminal to be sent to the location aiding server, based on the first message and the second message (column 6, lines 36-39; column 20, line 44 to column 21, line 18). When queried if there are enough GPS satellites, the GPS receiver can answer “yes” or “no”. If “yes” then DGPS corrections will be acquired through the call processing section. Otherwise, if non-GPS TOA or TDOA positioning is being used, DGPS corrections would do no good, so they would not be acquired. So location aiding DGPS signals will selectively be acquired when the second message is “yes, there are enough GPS satellites in-view”.

In regard to claim 3, Watters further discloses the GPS section further comprises a processor (550) separate from the call processor (515).

In regard to claims 4-5, Watters further discloses the predetermined strategy employed by the call processor of the GPS section is determined by at least one parameter selected from a group comprising: a signal level of received satellite signals, ***a number of satellites from which signals are being received***, a frequency range used for searching for satellites, a time range used for searching for satellites, and a current searching status of the GPS section (column 20, line 44 to column 21, line 18).

In regard to claim 6, Watters further discloses the second message comprises a message indicating that a QoS request can be met by the GPS section (column 20, line 44 to column 21, line 18), when “yes” is sent.

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In regard to claim 10, Watters further discloses the second message comprises a message indicating that a QoS request cannot be obtained by the GPS section (column 20, line 62 to column 21, line 18).

In regard to claims 11-12, Watters further discloses the call processor switches an operational mode of the GPS section in response to the second message (column 20, line 62 to column 21, line 18). That is, it changes the mode from positioning to not positioning because TDOA positioning is now being used.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bloebaum in view of IDS Document Krasner (US 5,663,734 A).

Krasner teaches the interchangeability of several methods of GPS positioning, including method 1, sending aiding information to the mobile, which calculates its position, and method 3, sending aiding information to the mobile, which returns calculated pseudoranges to the aiding server which then calculates the mobile's position (column 4, lines 40-61). It would have been obvious to replace the calculation of the position at the mobile unit in Bloebaum with the calculation of the position at the location aiding server, as taught by Krasner (column 4, lines 40-61), in order to reduce the cost of the mobile unit. The mobile would require fewer processing

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instructions and therefore smaller storage, and would perform fewer computations and therefore would require less processing power (a less expensive processor) as well as less memory to store intermediate variables in (for a less complicated calculation), and thus reduces the cost of the mobile unit.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watters in view of Biacs.

Biacs teaches an alternative to standard DGPS, where a correction is sent from the location aiding server to the GPS receiver, is what is known as IDGPS (inverse DGPS or inverted DGPS), where the uncorrected position is sent to the location aiding server, and the location aiding server calculates the corrected position, and sends that to the GPS receiver (column 2, line 61 to column 3, line 19). It would have been obvious to replace the DGPS correction of Watters with the IDGPS correction procedure of Biacs (column 2, line 61 to column 3, line 19) in order to reduce the cost of the mobile unit. The mobile unit would not require a differential correction engine (column 3, line 13), thus reducing the cost of the mobile unit.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).



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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Present Application claims 1-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Patent claim 19 of US 6,462,708

A. Although the conflicting claims are not identical, they are not patentably distinct from each other. Present Application claim 1 is essentially the same as Patent claim 19, where the Patent's "strategy selector" (column 10, line 1) is equivalent to the Present Application's "call processing section" and the Patent's "GPS section and the strategy selector pass information between the GPS section and the strategy selector" (column 12, lines 15-17) is equivalent to the Present Application's exchanging a first message and second message. Once the main idea of claim 1 is known, the additional changes are obvious, such as the obvious arguments with regard to claim 2 discussed in the 35 USC 103 rejections above.

9. Present Application claims 1-14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Copending Application claim 39 of Copending Application No. 10/213,767. Although the conflicting claims are not identical, they are not patentably distinct from each other. Present Application claim 1 is essentially the same as Copending Application claim 39, where the Copending Application's "strategy selector" is equivalent to the Present Application's "call processing section" and the Copending Application's "GPS section and the strategy selector pass

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information between the GPS section and the strategy selector” is equivalent to the Present Application’s exchanging a first message and second message. Once the main idea of claim 1 is known, the additional changes are obvious, such as the obvious arguments with regard to claim 2 discussed in the 35 USC 103 rejections above.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. The examiner also finds the following reference(s) relevant:

France (column 10) and Ahn, who disclose IDGPS.

Soliman (US 6,353,412 B1), who discloses aided GPS mode, IDGPS mode, and aided-DGPS mode (column 4, 4<sup>th</sup> paragraph).

Applicant is encouraged to consider these documents in formulating their response (if one is required) to this action, in order to expedite prosecution of this application.

11. The examiner also finds the following reference(s) relevant, but not prior art:

Vilppula, who discloses determining which position techniques to use based on required accuracy. Accuracy of available techniques is determined by requesting and receiving accuracy. Assisted-GPS is a known positioning technique. Hence the invention of Vilppula, where assisted-GPS is one of the available positioning techniques, is relevant to the present invention.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred H. Mull whose telephone number is 703-305-1250. The examiner can normally be reached on M-F 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on 703-360-4171. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Fred H. Mull  
Examiner  
Art Unit 3662

FHM  
February 27, 2003

  
THOMAS H. TARCZA  
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